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ABSTRACT

Staff development for middle-grades educators has become increasingly important as theory, research, practice, and policy have converged to produce information and recommendations to revise and improve middle-grades education. This report includes a review of the major purposes of staff development, data on teacher reactions to staff development experiences, a summary of the key components of effective inservice programs, and a dicussion of recent policy recommendations. The report offers a five-point rationale for a policy regarding staff development. (1) An on-going and career-long program should be available to all personnel working with middle-grade students. (2) Staff development content should relate to the specific characteristics and needs of students as well as teaching conditions. (3) The sturucture of staff development is critical to its success. (4) Evaluation and staff development should be linked. (5) A separate certification should be required for professionals working in the middle level grades. Three tables and 43 references are included. (LMI)

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Report No. 38

June, 1989

STAFF DEVELOPMENT IN THE MIDDLE GRADES

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The Johns Hopkins University

U.S. DEPARTMENT OF EDUCATION
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Staff Development in the Middle Grades

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The Center

The mission of the Center for Research on Elementary and Middle Schools is to produce useful knowledge about how elementary and middle schools can foster growth in students' learning and development, to develop and evaluate practical methods for improving the effectiveness of elementary and middle schools based on existing and new research findings, and to develop and evaluate specific strategies to help schools implement effective research-based school and classroom practices.

The Center conducts its research in three program areas: (1) Elementary Schools; (2) Middle Schools, and (3) School Improvement.

The Elementary School Program

This program works from a strong existing research base to develop, evaluate, and disseminate effective elementary school and classroom practices; synthesizes current knowledge; and analyzes survey and descriptive data to expand the knowledge base in effective elementary education.

The Middle School Program

This program's research links current knowledge about early adolescence as a stage of human development to school organization and classroom policies and practices for effective middle schools. The major task is to establish a research base to identify specific problem areas and promising practices in middle schools that will contribute to effective policy decisions and the development of effective school and classroom practices.

School Improvement Program

This program focuses on improving the organizational performance of schools in adopting and adapting innovations and developing school capacity for change.

This report, prepared by the Middle School Program, discusses the need for and the structure of staff development in middle grades schools in light of current and emerging educational theory, research, practice, and policy.

Abstract

Staff development for middle grades educators becomes increasingly important as theory, research, practice, and policy converge to produce information and recommendations to revise and improve middle grades education. This report reviews the major purposes of staff development, presents data on teacher reactions to their experiences with staff development, summarizes the key components of effective in-service programs, and discusses recent state policy recommendations about staff development in middle grades schools.

Staff Development in the Middle Grades

Educational *theory, research, practice, and policy* are converging in ways that highlight the importance of staff development for middle grades educators.

Theory. Leading educators who have strongly influenced the middle school movement have formulated extensive lists of recommended practices based on well-documented facts about adolescent development and on their beliefs about effective schools for early adolescents (Alexander and associates, 1968; Alexander and George, 1981; Eichhorn, 1966; Toepfer, 1987; and others). Their ideas have given shape and direction to educational practice, but the recommended practices have not been rigorously tested. At this time, we know little about the best ways to arrange the curriculum, instruction, and other school experiences for middle grades students. But intriguing information is beginning to accumulate in new research.

Research. Recent research at this Center suggests that different organizational forms in the middle grades -- such as departmentalization vs. self/contained classes, or homogenous vs.heterogenous grouping -- have different effects on important student attitudes and achievements. For example, *departmentalized programs* that emphasize high-quality subject-matter specialization may be particularly important for increasing students' academic test scores, whereas *self-contained classes* or those that emphasize caring, responsive relations between students and teachers may be particularly important for building and maintaining students' positive attitudes toward school (Becker, 1987; MacIver and Epstein, 1989; McPartland, 1987; McPartland, Braddock, Coldiron, 1987). McPartland (1987) concludes that middle grades educators need to understand the trade-offs that occur when they choose certain practices over others. In particular, educators must consider how to balance organizational forms and

instructional approaches to create school conditions that support *both* academic learning and positive attitudes.

Data were collected from a national sample of principals in schools that contain grade 7 to describe the diversity of grade spans and practices in the middle grades (Epstein and MacIver, 1989). These data demonstrate how grade span and community characteristics are associated with different grouping practices in the middle grades, teacher-teaming arrangements, curricular offerings, instructional approaches, school goals, teacher certification patterns, articulation programs, and other practices that often are recommended for middle grades education.

From these data, Becker (1989) analyzed curricular and instructional practices in the middle grades. He reports how grade span and community characteristics affect students' course experiences and learning activities. For example, schools that begin with the elementary grades (such as K-8 schools) are more likely than other schools to include reading instruction, emphasize drill and practice activities in most academic courses, and limit non-academic course offerings to seventh grade students. As another example, schools dedicated to the middle grades (such as 6-8 or 7-9 schools) in middle class communities are more likely than other schools to offer more foreign language and algebra courses and use a richer set of instructional approaches in classrooms in academic subjects.

MacIver and Epstein (1989) use the national data to examine practices designed to be responsive to the needs of early adolescents--e.g., advisory groups, interdisciplinary teams of teachers, remedial instruction, activities to ease the transitions from elementary to middle grades and middle grades to high school, and recognition of student progress and effort on report cards. When school principals and staffs are strongly committed to these practices and when the practices are well organized, the schools and students benefit with fewer expected dropouts, fewer retentions during the middle grades, and higher ratings of the quality of the school programs. For example, well-implemented advisory group periods are linked to better guidance services and lower expected dropout rates in the long term. Interdisciplinary teaming appears to

be a keystone for strong middle grades programs, overall. Certain practices for remedial instruction (e.g., an extra subject period for remediating skills) are believed to reduce the expected dropout rate in the long term. Successful articulation activities reduce retention rates at the end of the transition year, compared with less successful programs.

Knowledge is advancing on the effects of different middle grades practices. New information must find its way into staff development activities so that educators will be able to choose knowledgeably among middle grades practices to implement in their own schools.

Practice. In practice, the lists of "dos and don'ts" for middle grades education have been interpreted and implemented loosely and diversely. The political constraints that guide schools and districts make some suggested practices possible and others impossible. Because clear research and evaluation evidence is not yet available on all issues, some schools will not (indeed, need not) follow blindly a set of suggested practices. For example, some schools will not eliminate all homogenous grouping or tracking in all subjects; some schools cannot or will not bar interscholastic sports competitions; some districts will not permit teacher advisory periods for group guidance; some will not provide the resources or flexibility needed to enable interdisciplinary teams of teachers to plan and work together; and some have no interest in considering alternative grade spans. Countless other choices about school organization and practices are based on constraints imposed by the politics, demographics, and histories of districts, schools, and communities. These and other topics need to be discussed in school and in district staff development programs for middle grades educators.

Early surveys by the NASSP concluded that middle level schooling was developing a unique identity, but that organizational, instructional, and curricular practices varied greatly across grades, in different subjects, and across districts (Valentine, Clark, Nickerson, and Keefe, 1983). In the "real world," then, there are many different, potentially effective practices in middle schools, junior high schools, K-8 schools, or schools with other grade spans that educate early adolescent youngsters (Lipsitz, 1984). The natural variation in on-going practices "out there"

can be studied and evaluated to determine the effects of the different practices on student learning and development. It is important for educators to understand the likely consequences of their decisions and to have the best information available to contribute to discussions and debates on changing policies.

Policy. In several states and in many school districts, policies are being written based on available theory, research, and practice to guide educators toward more effective middle grades organization, instruction, and curriculum. Two states -- California and Maryland -- have initiated extensive Task Force processes to develop comprehensive, yet flexible, guidelines for middle grades organization and practices.

> The California Middle Grade Task Force Report, "Caught in the Middle," (1987), includes discussions and recommendations about curriculum; instruction; student diversity and potential in intellectual, social, emotional and physical development; organization of schools; scheduling; transitions; staff development, and other topics.
>
> The Maryland Task Force Report, "What Matters In The Middle Grades" (1989), includes 35 recommendations for seven key questions about the desired outcomes of middle grades education, the important participants in middle grades education, the organization of instruction, the needed resources to support students and teachers, the administration and climate of the school, and the implementation and evaluation of improved programs.

Both states recognize the continuing importance of strong staff development and education for teachers and administrators.

When *theory*, *research knowledge*, *practices*, and *policies* are changing, staff development becomes critical for producing better teaching and better learning. In the next sections of the paper, we review the major purposes of staff development, present information from teachers on their reactions to different aspects of their experiences with staff development, summarize the key components of effective in-service programs, and discuss the States' policy recommendations on staff development.

Forms and Purposes of Staff Development for Middle Grades Educators

Staff development is a continuous process including pre-service, in-service, and advanced education. The three standard forms have particular meaning for middle grades teachers and administrators.

1. *Pre-service education and certification.* Pre-service, college training provides general, "entry-level" skills that may be used by most teachers in most settings. Pre-service programs form the base on which in-service education builds (Alexander, 1984). This base is weak for middle grades educators because there are few pre-service programs that offer comprehensive courses in early adolescent development and middle grades education (Lipsitz, 1980).

In addition to improving pre-service education for the middle grades, there is increasing attention to the importance of separate certification for middle grades educators. About 22 states have special middle grades certification, endorsements, credentials, or licenses, although these are not always required of middle grades educators (Children's Defense Fund, 1988). Specific certification in middle grades education (e.g., 4-8, 5-8; 5-9) would assure that new teachers would purposely choose the middle grades, develop competence in their subject area, understand early adolescent development, and apply effective middle grades organization and instructional methods. The goal is for teachers to start with a common mind-set about the uniqueness of the middle grades, about useful teaching approaches, and about the characteristics of early adolescents (Lipsitz, 1980; Toepfer, 1984).

When teachers have a clear commitment to the middle grades, as evidenced by their choice of pre-service education and separate certification, they may also be more committed to in-service staff development to enhance their expertise at the middle level.

2. *In-service education.* In-service activities maintain, extend, or improve educators' skills, or develop new skills needed to work effectively with middle grades students. These activities can focus on the conditions and needs of staff in particular schools. Educators who do not have

pre-service preparation in middle grades education and those who need to up-date their knowledge about new approaches and ideas benefit from well-designed in-service education. Presently, that includes almost all educators who work with early adolescent youngsters.

Toepfer (1984) notes that staff development is especially important for "displaced" teachers -- high school or elementary teachers who are relocated to a middle or junior high school but who had no special training in middle grades education or children. And, he concludes, good staff development is needed by all teachers because of the growing information on the middle grades. Indeed, *all* staff, not only teachers, need high-quality staff development activities to assure high-quality programs in the middle grades.

3. *Advanced education and career development.* Beyond pre-service preparation and in-service enhancement, staff development refers to the professional development programs that educators enter to earn advanced degrees, new credentials, and new positions in education. Many teachers and administrators find that graduate courses provide the first specific focus on early adolescent students and their schools.

In this paper, we focus on *in-service* staff development activities that are provided by State Departments of Education, districts, and schools, and that are not necessarily part of advanced education programs.

Purposes of Staff Development for Middle Grades Educators

Staff development activities serve several important, legitimate purposes:

AWARENESS, including providing information on important concepts, programs, ideas, and research findings for personal improvement and renewel, boosting morale, increasing feelings of competence.

INFORMATION TRANSMISSION, including providing educators with required information on mandatory federal, state, district, and school policies, and how to comply with regulations.

ATTITUDE CHANGE, including the preparation needed *before* educators can or will consider investing time in new curricula or new instructional or management approaches.

SKILL ACQUISITION, including training or retraining educators in particular approaches, techniques, practices to maintain skills or to learn skills for new curricula, school or classroom management techniques, and other improvements.

BEHAVIOR, including applying newly learned skills for more effective teaching and administration, trying new curricula or instructional approaches, or otherwise using skills and information gained in staff development to improve practice.

STUDENT IMPROVEMENT, including applying new approaches and techniques to help more students make measureable, positive, changes in learning and development.

The above list is a hierarchy of increasingly difficult purposes of staff development -- from relatively simple awareness to complex change in teachers' and students' learning and behavior. Increasingly intensive and extensive investments of skills, time, and resources are needed to meet and evaluate the impact of more complex staff development activities . When these investments are not made -- and staff development is neither evaluated nor improved, teachers and administrators express dissatisfaction with in-service activities.

Successful staff development activities have three broad goals:

- To improve *schools* by creating a more professional and positive climate, with the staff working together as a staff, and with better understanding of and relations with the community.

- To assist *teachers and administrators* by increasing their knowledge (content), skills (pedagogy) and understanding (e.g., of early adolescence, of school organizational structures and processes).

- To promote more successful *students* by increasing student learning and development through more effective teaching and school organization.

Some suggest that the success of staff development activities is best measured by changes in the attitudes and behaviors of teachers or administrators. Others say that the success of staff development, ultimately, is represented by changes in the attitudes, behaviors, and achievements of students. The two are connected, of course, but the emphasis on students is very important. If staff development produces teaching behaviors that result in no less effective student learning, the approaches may be viable, equally effective alternatives, giving teachers a variety of options for organizing their classes and instruction. If staff development promotes more effective

student learning for all students or for an important, identifiable subgroup of students, then new approaches may become preferred practices, with staff development recommended for all or most teachers.

Given the three broad goals outlined above, it is important to evaluate staff development for changes in school climate and staff relations, individual teacher and administrator knowledge and behaviors, and, in time, (i.e., after enough time) to evaluate the effects of different teaching approaches on student learning, adjustment, development, or other skills.

An emphasis on student outcomes is especially important for middle grades programs of staff development. The primary reason for focusing on better middle grades programs is to help more early adolescents succeed in school and to motivate them to stay in school through high school. Thus, staff development that improves teachers' efficiency, understanding, or actions must also improve early adolescent students' school experiences and success.

Table 1 presents two examples of staff development for middle grades teachers that illustrate the different information gained by evaluating teachers' behaviors compared to evaluating teachers' and students' behaviors. The programs evaluated are similar to many other subject-based staff development initiatives that are conducted in middle grades schools where the children are not achieving as well as they could. Only the second study, however, provides the "bottom line" on whether the staff development activities helped teachers help their students improve their skills.

Teachers' Reactions to Staff Development

What do middle grades teachers say about staff development? How do they evaluate these activities? Are teachers in the middle grades sufficiently prepared for new curricula that are adopted by their schools or districts? Do teachers participate in decisions about staff development? Are staff development activities conducted effectively? These questions are addressed in several recent surveys and reports.

Table 1: Examples of Evaluations of Staff Development Activities

1. DuPuis, Askov, and Lee (1979) examined the effects of staff development activities on junior high teachers' behaviors:

ISSUE	SAMPLE	PURPOSE	RESULTS
Bringing READING instruction into other subject areas in the middle grades.	57 experimental & 72 comparison teachers in all content areas in 3 jr. high schools in Pennsylvania.	Help teachers of all subjects understand how to add reading instruction, as needed, to the teaching of their own specialty. The teaching of reading in all content areas should help students read better in all subjects and score higher on reading tests.	Experimental teachers demonstrated more reading-related skills in more activities with their students than did the comparison teachers who did not participate in staff development activities.

2. Conley (1983) examined the effects of staff development activities on middle grades teachers' practices and their students' successes:

ISSUE	SAMPLE	PURPOSE	RESULTS
Improving reading skills	32 teachers of 6th graders in 8 elem. schools, and 1000 black, low-SES students, in Chicago.	To increase reading skills of students below grade level by increasing time for reading instruction by 40 extra minutes per day. Experimental and control teachers received the same program materials. Experimental teachers also received staff development, instruction, observation, and feedback over one year.	All students made at least normal gains over the 6 month interval. Experimental teachers' students made twice the progress (1.5 yrs vs. 7 months). Having the needed material helped all teachers do an adequate job, but good staff development increased the experimental teachers' effects on their students' learning.

In the National Education Association's Conditions and Resources of Teaching (CART) survey (Bachrach, Bauer, & Shedd, 1986) teachers offered reactions to several aspects of staff development. Over 55% of the respondents rated staff development as "low in *quantity*" and also "low in *quality*" for their needs. Of all sources of job-related knowledge and skills, in-service training ranked *last* in the list, with only 13% of the teachers saying their in-service experiences were "definitely effective." Most teachers (over 60%) reported that they did not often get to participate in decisions about staff development, and about 70% believed they should have opportunities to participate more in these decisions. Finally, about 85% of the teachers did not often discuss their own training needs with their principals. This suggests that staff development, evaluation of teaching quality, and individual growth are not often connected.

In its report, *An Agenda for Excellence at the Middle Level*, the National Association of Secondary School Principals emphasizes that teachers should be given an active role in planning their own continuing education and professional development. The report also supports the use of the talents of local teachers to assist other teachers.

In the Pennsylvania State Department of Education's Educational Quality Assessment (EQA) survey (1984), Grade 8 teachers from 227 schools reacted to four items about their staff development experiences. Table 2 presents these reactions.

Table 2: EQA Reports of Staff Development Experiences (1984)

ITEM	NOT A PROBLEM	MODERATE-SERIOUS PROBLEM	CRITICAL PROBLEM
1. In-service education provided by the district does not meet my needs.	22%	59%	18%
2. When new curriculum programs are initiated, I am not consulted or trained.	55%	38%	6%
3.There is little interaction among teachers in this school, i.e, everyone is doing his/her own thing.	38%	56%	5%
4. The teachers don't seem to be able to work well together.	64%	33%	5%

The EQA items 1 and 2 report teachers' reactions to two different aspects of in-service education. Item 1 suggests that most teachers (78%) were *dissatisfied* with in-service activities for personal growth. Item 2 suggests that at least half the respondents were *satisfied* with the way their districts and schools provide training for new curriculum program initiatives.

Toepfer (1984) places importance on the connections between curriculum planning activities and the subsequent staff development needed to successfully implement new or revised programs. This is basic, essential in-service education. The EQA data suggest that districts may be more successful in meeting this requirement than they are in providing programs that are responsive to teachers' individual needs or teacher-initiated topics.

Items 3 and 4 report teachers' reactions to the qualities of staff interactions that are needed for the successful implementation of new programs. Good staff relations would be a prerequisite, for example, for successfully implementing interdisciplinary team teaching in the middle grades. In item 3, most teachers (61%) say there are *serious problems* in the extent of interaction that occurs among teachers at their schools. In item 4, most teachers say there are *no problems* in working together when they have the opportunity. The seeming contradictions in these items reflect the fact that disorganized staff development activities rarely mobilize and guide productive interactions among teachers.

Staff development is more than a single teacher developing personal skills (Fenstermacher and Berliner, 1985). It also refers to the development of the staff as a staff. This is especially important where there are mixes of senior teachers and new teachers, or secondary-certified and elementary-certified teachers, as there are in most middle grades schools.

Goodlad (1983) reports that there is little or no on-going exchange of ideas among teachers or administrators within or between schools, in most places. In his sample of elementary and

middle grades teachers, more staff development and interaction occured in the elementary than in the middle grades. We did not see different reactions to staff development of elementary, middle, and high school teachers in the EQA survey data that we examined.

In its 1986 survey, Pennsylvania's Educational Quality Assessment included two items about staff development. Table 3 summarizes the responses from seventh grade teachers.

Table 3: EQA Reports of Staff Development Experiences (1986)

ITEM	ALWAYS/ ALMOST ALWAYS	FREQUENTLY	OCCASIONALLY/ NEVER
1. Released time and financial support for in-service training are provided for teachers.	37%	26%	37%
2. I attend conferences related to the areas that I teach.	24%	22%	54%

In item 1, about equal numbers of teachers say that extra time and compensation are *always* and are *never* provided to teachers for in-service training. The phrase "for teachers" makes it impossible to know whether teachers are referring to their own experiences or to a policy for some teachers some of the time. Better data would clarify who receives this support, how often, for what types of training, in what locations, and with what results.

In item 2, over half the middle grades teachers say that they do not frequently attend conferences related to the areas they teach. But, almost half the teachers report that they always or frequently attend useful conferences. In a half-full or half-empty debate, we would suggest that the numbers of teachers whose needs for professional development are NOT being met is unacceptably high. Better data would tell whether and how conferences are useful, under what conditions of voluntary or required attendance, and with what results for teaching practice and student learning.

The survey data from several sources suggest that most teachers are less than satisfied with their in-service activities. Data from interviews with teachers show the same wide range of opinions of satisfaction and dissatisfaction with current staff development activities (Pansegrau, 1984). Most staff development falls short for large numbers of teachers, mainly because it is not designed to help teachers feel more professional, work together with other teachers, or improve individual skills. And most staff development pays little attention to the ultimate impact of the staff development activities on student skills.

Research on Staff Development and Middle Grade Educators

Despite most teachers' general dissatisfaction with most of their own staff development activities, staff development research has evolved with increasingly specific ideas about components and procedures for good staff development programs. Reviewers have tried to bring order to a voluminous set of variables that could be important in the design of staff development programs and activities. What emerges, at this point, is a set of thoughtful "hunches" about potentially important variables for successful staff development.

Cruickshank, Lorish, and Thomps (1979) bemoaned the lack of definition of in-service teacher education and the paucity of guidance for educators who are responsible for those programs. They challenged researchers to do more pointed studies of the facts and propositions needed to understand the results of specific staff development designs. Korinek, Schmid, and McAdams (1985) discussed 17 studies conducted from 1974-1983 that best represented the issues in research and questions in practice about in-service training (mainly for teachers). The 17 were selected from a set of 100 studies conducted between 1957-1983.

From the earlier reviews and from our own exploration of studies conducted since 1983 (drawn from the ERIC system, *Psychological Abstracts*, and key documents on middle grades education), we have compiled a set of variables that have been studied in research and that

illustrate the wide range of potentially important factors for successful staff development. Each entry to the list represents a condition that is considered important in one or more studies. The options under each category are alternatives that need to be considered by those who plan, conduct, or study in-service education.

Content: What are the topics for staff development in the middle grades?

Research-based and evaluated practices
Promising clinical models
Early adolescent development
New knowledge about middle grades instructional practices and effects on students
New knowledge about middle grades school and classroom organization, management, and effects in students
New knowledge about school and family connections in the middle grades

Location: Where should different types of staff development activities be conducted?

School-based or college-based
In classrooms of other teachers in same or other schools
In one or several locations

Time/Schedule: What is the best time to schedule different staff development activities?

Before/after school
During common planning periods
Peer coaching during class teaching time
Evenings
Weekends
Summer
Same or varying times

Duration: How long must in-service activities last to assure success? For what activities and for what goals?

Short or long duration of training
Short periods of time between cumulative sessions
Long-term, systematic activity
Continuous, sequential and cumululative activity

Sponsorship/Coordination: Who should sponsor, support, and coordinate activities? How much could/should the priorities or interests of different sponsors coincide? What are the responsibilities of those who sponsor staff development programs?

State, district, or school sponsored
Support of school administator(s) at district and school levels
Coordination of staff development with school goals
Provision of needed funds, time, space, materials, and other resources to conduct staff development

Attendance: Which staff members should attend which activities? Is attendance voluntary, required, selected by competition? Who is asked to change behavior? by whom? for what reasons?

Individual Teachers
Whole school staff
Department
Team
Grade level teams/groups/departments
School level administrators
District level administrators

Leaders' and Participants' Qualities and Characteristics: How do the skills, talents, and personalities of the leaders and participants contribute to the design, conduct, needs, success of different types of in-service?

Demographics, experience, attitudes
Grade level, subject specialties, prior training
Sense of efficacy, control, ability to change

Format: How should the content be organized?

Workshops
Courses
Specific skills training sessions
Short-term institutes
Academies or teaching clinic
Sabbatical leaves
Same or varied formats

Organization of Instruction: How do staff development activities reflect successful principles of education for adult learners?

Demonstration, small group discussions, supervised trials or guided practice, feedback, coaching, peer observation
Use of technology in the design and delivery of in-service activities.
Personalized (individual) coaching, feedback, and monitoring
Intensive and extensive opportunities to practice new approaches to add them to teaching repertory.

Participation of Teachers: How much should teachers contribute to decisions about staff development and the conduct of activities?

Teacher participation in selecting topics, goals, times, forms, and desired outcomes of staff development
Teacher participation in creating ideas, materials,and methods for classroom application
Peer observation, interaction, coaching, sharing ideas with other teachers
Teachers teaching other teachers, teachers as change agents.
Self-instruction to learn and to apply information on specific issues
Encouragement of experimentation

Motivation: Why should participants want to gain information, change attitudes or behavior?

Teacher/administrator commitment to change
Rewards, incentives, recognition for teachers who participate
Cost/benefit discussions and analyses
Released time, financial support, compensated time
Evaluation of activity by participants
Career ladder programs with lead or master teachers
Collegial relationships, and openness to sharing ideas
School climate to make changes, improvements in teaching and learning

Since 1977, the list of variables in research on staff development has changed. For example, there is greater emphasis on the importance of teachers' participation in the design and conduct of staff development due in part to recent attention to the importance of enhancing teachers' professional status (Colaradarci and Gage, 1984; Fenstermacher and Berliner, 1985; Fielding, 1986; Toepfer, 1984).

On a related theme, Sparks (1986) points to the importance of peer-observation or peer-coaching -- a recent emphasis on teachers assisting teachers -- as a potentially useful method of providing teachers with feedback on their instructional approaches. Peer coaching will need to be studied to see if it as effective as trainer-coaching in reinforcing teachers' applications of new practices.

Research on school effects, effective schools, and other school improvement plans created more awareness of the need to study the effects of staff development on student outcomes. Over the past decade, it has become better understood that researchers need to allow time for teachers to internalize new approaches and specific practices before measuring effects on students. Researchers will need to analyze "lagged" effects on student learning to evaluate the impact of

teacher staff development.

Implications of Research on Staff Development for the Middle Grades

The long list of variables has important implications for the design of staff development programs for middle grades educators. For example, it is not always desireable that all teachers or all school staff attend the same in-service activities. In-service education is needed in forms that will help middle grades teachers understand middle grades students and their schools. This may mean different staff development activities for different teachers, such as providing elementary-trained teachers with information on their subject specialties to extend their expertise in ways that are appropriate for teaching early adolescents, and providing secondary-trained teachers with information about early adolescent development to improve their understanding and interactions with their students.

The organization, timing, and location of staff development activities may have to vary.

States, districts, and schools will need to experiment with forms of professional development, alternative structures, timing, and places for staff development, with ample opportunity for teachers to work together to help each other build solid programs in their schools. Middle grades teachers and principals will benefit from some regular activities in their own schools, visits to other middle grade schools with unique or promising programs, and some activities in other locations.

States, districts, and schools will need to provide time for comprehensive and coordinated staff development programs. This may mean one-or-two-day awareness sessions some of the time, but will also mean activities spaced over several-months or several-years. Well-planned, well-coordinated programs will be needed to build new capabilities and practices of middle grades teachers.

Teachers' motivation for attending staff development and applying new approaches may be

boosted by incentives and rewards that they value. Staff development opportunities that include incentives for professional gain may be more effective than other types. In-service activities that can be applied to credits, degrees, or professional advancement may be powerful ways to increase the effectiveness of middle grades educators.

All possible conclusions have been drawn from research on in-service education. Some say staff development is ineffective for changing education (Fullan and Pomfret, 1979; Pink, 1989). Others say that despite its weaknesses, it needs to be done and we need to work on effective staff development activities (Little, 1982). Others conclude that when staff development is done well, it works well (Griffin, 1983; Guskey, 1986; Joyce and Showers, 1980; Korinek et al., 1985; Sparks, 1986; Wade, 1984/85). When we think of present practices, likely problems, and potentials, the different conclusions about staff development all have some truth to them.

It is unlikely that any one purpose, content, form, or approach will be found to be the best or only way of conducting in-service education for middle grades (or any) educators. Wade's (1984/85) meta-analysis of 91 quantitative studies of staff development suggests that many forms of staff development are at least moderately effective, including courses, workshops, mini-courses, institutes, and self-study or self-initiated activities. It is likely, especially in the middle grades, that staff development activities will be needed in a variety of forms, times, and locations to help educators reach the "grand goals" they set for themselves and for students. The most important factors may be the *coordination* of in-service activities *over time* in *planned sequences* to help teachers and administrators build clear and useful skills that will enable them to reach their goals.

State Policy Recommendations on Staff Development

Two states -- California and Maryland -- have developed relatively comprehensive policy statements on staff development for middle grades educators that go beyond generalities about its importance (California State Department of Education,1987; Maryland Task Force on the Middle Learning Years, 1989). These states recommend that middle grades teachers and principals should participate in comprehensive well-planned, long-range staff development programs that emphasize professional collegiality and that build a common set of understandings and approaches to middle grades students and instructional programs. They emphasize school-site-specific staff development activities that require teacher participation in major ways to determine the design, content, and implementation of staff development activities.

California (1987) suggests three fundamental themes for staff development in the middle grades: academic content, human relations, and pedagogy. Both states categorize major topics within these themes. Content refers to academic content, subject specialization, early adolescent development, and other new and needed information; human relations refers to human skills between and among staff and students, school and family connections, community relations, and other skills of interaction and exchange; and pedagogy refers to new methods of instruction, school and classroom organization for the middle grades, and other techniques for more effective teaching to promote more effective student learning.

The California and Maryland reports agree on several topics that most middle grades teachers and administrators need to know more about in order to conduct effective school and classroom programs. Those topics include: middle grades philosophy, adolescent characteristics, curriculum, school and classroom organization, instructional methods, interdiciplinary teaming/team teaching, active learning environments, student learning styles, motivational strategies, teacher-advisory program, maintaining discipline, evaluating outcomes of programs, and others.

Both reports discuss the structure of staff development and the importance of teacher participation in the selection and design of these activities. The two reports emphasize: collaborative planning of teachers, principals, other school staff and district leaders on middle grades goals; balance and coordination of state, district, and school priorities for staff development; long-term and short term goals for staff development and professional advancement; support from superintendents, principals, parents, and community; and provision of time, facilities, materials, equipment and other resources needed to conduct, follow-up, and evaluate successful programs.

Maryland recommends a Principal's Academy specifically designed to address middle grades education, and calls for fully-coordinated activities across state, district, and school levels for a "full-court press" on improved middle grades education.

A Five-Point Guide for Staff Development in the Middle Grades

From the California and Maryland reports, from teachers' evaluations of the quality of their current staff development activities, and from research on alterable variables for successful in-service education, we suggest a five-point rationale for a comprehensive policy for staff development for middle grades educators.<1>

1. All professional and support personnel working with middle grades students should be provided with continual staff development.

Middle level students need excellent teachers and administrators in order to maximize their academic, social, and personal development during the middle grades and prepare successfully for high school. Excellent teachers and administrators are expected to be well educated before entering the profession, but need to continue professional development throughout their careers

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<1> These five points were discussed and developed as a background paper for the Maryland Task Force on the Middle Learning Years (1989) by a subcommittee of the authors and Tom Evans, Jim Lawson, Bronda Harrison, Jerelle Francois, and Mildred Casey.

(AASA, 1986). Two categories of continual professional training are necessary -- *general* teaching and administrative skills and knowledge and *local or school-site* information and approaches needed for particular schools, students, and communities.

Staff development must be available to *all* professional and support staff including teachers, principals, superintendents, school board members, curriculum supervisors, guidance personnel, and other school and district administrators who are in charge of middle school programs and people. All school staff members need to update and improve their knowledge, leadership styles, public relations skills, and instruction and management approaches that will help them work successfully in the middle grades and improve their professional standing. Staff development that is only for teachers misses the point as these activities are needed by all school staff who are responsible for improved middle grades education.

Staff development is *on-going* and *career-long* to assure that educators continue to add new knowledge, technological advances, and approaches from research and practice, *long-range* to prepare for changes and requirements before they become problems, and *sequential* to build a cumulative repertory of skills to strengthen the overall professionalism of individuals teachers and school staffs.

Pre-service training is necessarily *general* because the purpose is to build uniform skills to improve the overall quality of the nation's teachers and administrators (Holmes report, 1986). But educators know that inservice training needs to be *specific* to help schools respond to local conditions (e.g., economic, race, ethnic, family, and community conditions) to increase student learning, reduce absenteeism, decrease the drop-out rate, improve school climate, and improve other outcomes for the students in their own schools (Carnegie Task Force, 1986). In order to assist professional advancement, some staff development should focus specifically on correcting weaknesses in teaching or management skills that are identified in the evaluations of teachers and administrators.

Staff development is important for all educators, but especially for those in the middle grades because of the complex nature of early adolescent students and the new knowledge base on instruction and management skills for the middle grades (AASA, 1986; California State Department of Education, 1986; Carnegie, 1986; Holmes Group Consortium, 1986.)

2. The content of staff development should relate to the specific characteristics and needs of the students and conditions of teaching in the middle grades. This should include but not be limited to: the nature of early adolescence, school and classroom organization, appropriate curriculum and effective methods of instruction, school climate, family conditions and parent involvement, community resources, articulation, and the changing nature of society. Staff development programs should emphasize the needed connections between and among these factors.

Each of these topics is important for building the professional skills of school staffs in the middle grades (Center for Research on Elementary and Middle Schools, 1985; Epstein, 1986; Epstein, in press; George and Oldaker, 1985; Lipsitz, 1980; Lipsitz, 1984; NASSP, (no date); Olson, 1986; U. S. Department of Education, 1986).

A. *Nature of Early Adolescence* -- An effective middle grades program should be based on knowledge about the students' cognitive and social skills in learning. Therefore, it is essential that middle level teachers have a thorough understanding of the physical, intellectual, social, and psychological development and diversity of early adolescents, and that they are able to translate this understanding into instructional programs that are appropriate for their students. Staff development activities are needed to build knowledge of the characteristics of middle grades students and ways to respond to their qualities and needs in school and classroom instruction and management.

B. *School and Classroom Organization* -- An effective middle grades program is based on an understanding of school and classroom organization including the efficient, equitable, and effective use of time, space, personnel, materials, and other resources for successful instruction and classroom management. Staff development activities are needed to increase understanding of alternative forms and effects of scheduling, grouping, staffing, team teaching, departmentalization, school-within-a-school designs, and other organizational structures at the *school level*, and to build understanding of within-class grouping, effective classroom management, whole class, individualized, or grouped instruction, heterogeneous and homogeneous groups, and other designs of the task, authority, reward, grouping, evaluation, and time structures at the *classroom level*.

C. *Appropriate Curriculum* -- Middle grades teachers and administrators must have specialized knowledge of the subjects they teach and a repertory of instructional strategies to engage all students actively, productively, and enjoyably in learning. Staff development activities can continuously renew and improve these skills.

An effective middle grades program is based on an academic curriculum and other school programs that balance the students' needs for active learning, movement, and hands-on activities

to help students master and extend basic skills, critical and creative thinking, study skills, and other competencies needed for success in the middle grades and in high school. Staff development can help prepare teachers and administrators to develop programs that balance curricular, co-curricular, and other activities, challenge students to learn and support their efforts, neither overestimate nor underestimate the level of the students' cognitive and social skills, and provide students with appropriate choices and decision making experiences while enabling teachers to firmly guide curriculum content.

D. *Methods of Instruction* -- An effective middle grades teacher uses a variety of instructional activities and materials to meet the diversity in needs, abilities and learning styles of middle grades students. It is critical, then, that middle grades teachers use staff development to establish and update their understanding of the methods of instruction that are most appropriate for the middle grades learner and be able to demonstrate the necessary skill to implement new approaches.

E. *Climate* -- An effective middle school staff understands the components of school and classroom climate and works to improve student, teacher, and staff morale to promote learning and positive attitudes toward school and positive interpersonal relations. Staff development can help educators understand, assess, and continually improve the physical aspects of the school environment (size and condition of the building), the psychological aspects of the school (attitudes, values, and goals), the mechanics of school operations (leadership, communications, expectations, decision making, fairness), and other components of school and classroom climate that affect achievement, attitudes, discipline, self esteem, cooperation and caring, and commitment to learning of all members of the school.

F. *Family Conditions and Parent Involvement* -- An effective middle level program acknowledges the importance of the family in the life of the students, and uses the strengths of families to encourage, support, and assist children's learning and development. Therefore, it is essential that the staff understands the characteristics and strengths of the families of their students, and develop and test new approaches to parent involvement in the middle grades to build a comprehensive and on-going program of school-family connections.

G. *Community resources* -- An effective middle grades program considers the complex, and unique characteristics of the community served by the school. Therefore, it is essential that the staff understands the feelings, beliefs, and attitudes of the community served by the school. Staff development can promote the understanding and management of the abilities and resources of the businesses, agencies, and citizens in the community and region to improve the school program and opportunities for students. Available resources may include volunteers at the school, community sites for instructional activities or students' work experiences, and the identification of talent to help schools develop new programs.

H. *Articulation* -- An effective middle grades program helps students make successful transitions from the elementary to middle school and from the middle grades to high school. For example, middle grades schools help students grow from the dependence that is characteristic of most elementary school students to the independence needed by secondary school students. Staff development can be designed to enable teachers and administrators to visit the feeder and receiving schools, talk with the staffs and students in these schools, and develop procedures needed for successful transitions. Staff development in articulation may cover such diverse topics as record keeping (to help teachers monitor students' initial skills, school placements, and progress), and communication skills to establish cooperative activities across the school levels.

I. *Changing nature of society* -- An effective middle grades program must prepare students to work, raise families, and enjoy life as adults in the next century. It is essential, therefore, that the middle grades staff considers the connections between the "knowns" of the present in school

and the "unknowns" of the future. Staff development is needed to enable teachers and administrators to understand the process of social change and to help students to deal with change.

The NASSP cautions that we cannot begin to know what information students will need to successfully negotiate their adult world, and therefore, "...we must teach them how to learn and how to adjust their lives to the changes that will surround them." (NASSP, undated).

Educators need to understand how social systems work and change, how children and their environments are changing, how to seek and apply innovation in teaching, and how to build students' creativity, decision making, problem solving, and coping skills so that they will have the skills needed to deal successfully with change (AASA, 1986).

There are many types of change in the students, in society, and in the schools that teachers and administrators must understand, monitor, and build into their teaching practice. The middle school educator is a vital link in preparing students for change because of the middle school's pivotal position between elementary and high school.

J. *Linking the developmental characteristics of students to school programs and classroom instruction* -- An effective middle grades program will organize teaching and learning to be responsive to the well-documented characteristics of early adolescence. It is necessary for middle grade educators to fully understand the seemingly contradictory conditions of early adolescence in order to design curricula, instruction, and other school experiences to resolve dilemmas such as students' needs for independence and guidance from adults, for individuality and conformity, for self-esteem and respect for others.

3. The structure of staff development is critical to its success.

The structure and organization of staff development refers to the systematic, regular, thoughtful process of planning, developing, implementing, and evaluating staff development activities for improving the curriculum, teaching, and learning in schools. It refers to the who, what, where, when, why and how of staff development topics and procedures. The success of staff development depends heavily on several factors including the clear identification of important purposes of activities; the leadership structure of who decides the topics, content, and delivery; the amount of time allocated for useful activities; the schedule, frequency, and location of meetings; and whether follow-up activities provide opportunities for implementing and evaluating new ideas.

The Carnegie Task Force (1986) on teaching and *Time for Results: The Governor's 1991 Report on Education* (National Governor's Association, 1986) suggest that we need to "deregulate" schools and give teachers *at the school site* the opportunity to participate in managing

school programs and staff development activities. In the NEA (1986) survey on "The Conditions and Resources of Teaching," teachers expressed dissatisfaction with the quantity and quality of most staff development experiences. The NEA emphasizes that teachers must play a major role in identifying needs and in planning and conducting staff development activities.

Staff development can be provided in various settings and forms to achieve many different goals for improved teaching and learning. All staff development does not have to be delivered in lectures or discussion groups in the school building or district office. There are many ways that knowledge, experience, and opportunities for professional development can be provided. These include mentor, peer, and coach assessments; grade level, team, and department meetings; visits to other schools and districts; higher education courses; and workshops by school, district, or outside experts.

Staff development to help educators understand the structure of staff development may be needed before substantive issues are selected and in-service activities conducted. In the long term, staff development activities planned by teachers, grade level teams, faculty committees, department chairs, principals, district administrators, and others in and out of the district need to be coordinated and sequenced so that activities add together to build a comprehensive set of skills for middle grades educators (Carnegie, 1986; Holmes Group Consortium, 1986; National Education Association, 1986).

4. Evaluation and staff development are inexorably linked.

Evaluation is a necessary part of on-going staff development and improvement. The evaluation process should serve two purposes -- to assure quality education programs for the middle grades, and to help middle grades educators extend their knowledge and skills in working with middle grade students. Evaluations should recognize the successful completion of staff development activities and should be linked to opportunities needed to correct weaknesses

identified in evaluations (Education Commission of the States, 1983; Maryland Commission on Secondary Education, 1985).

5. A separate certification should be required for professionals working in the middle level grades.

Middle grades teachers and administrators should be prepared to teach in and to administer grades 5 - 8. Preparation should address the unique characteristics of early adolescents and the curriculum content and instructional strategies that meet the needs of students in the middle grades.

Students entering the middle grades are making multiple transitions, experiencing profound physical, social, emotional, and intellectual changes simultaneously. They are entering puberty, entering middle school, entering more demanding peer relations, and establishing their independence and self-concepts at the same time they are continuing their work as students. Students who are facing many changes in their lives need teachers and administrators who understand the conditions and characteristics of the age group and who can create intellectually stimulating and supportive programs of learning. This can be accomplished best if teachers and administrators have special training and certification in middle grades education.

The quality and content of pre-service and advanced education is influenced by the certification requirements in every state. In-service education builds on pre-service education and continues to build on advanced degree programs. With separate certifications for middle grades teachers and administrators, a better, common knowledge base will be established. Then, in-service education can focus on critical and specific topics, new methods, and new ideas for improving the education of early adolescent students (California State Deparment of Education, 1986; Maryland Middle School Certification Committee Final Report, 1987; Lipsitz, 1980; Simmons, et al., 1979).

Conclusion

Staff development programs exist in every or nearly every school district in the country. They cost millions -- some estimate billions -- of federal, state, and local dollars (Fenstermacher and Berliner, 1985). We all know how most in-service activities work. They last about two hours (with a "break"). They are held right after school. The topic was selected by "someone" -- not always someone who knows the problems of the schools. The activities may have some connection with school programs, but the time is too short to adequately inform or change practice. Some participants leave the meeting thinking that the topic was "interesting" or feeling more up-to date on an issue. Others go away grumping about wasting their time. There is usually no follow-up to help teachers apply the information or ideas. Thus, most teachers who have been "in-serviced" do nothing to change their practices after the workshop, clinic, or short course. They are not expected to do so, not rewarded for trying, and not guided in their efforts.

If this pattern persists in the middle grades, there will be little improvement in the education of early adolescents over the next ten years.

Educators at all levels of schooling need better organized, responsive, continuous, and systemic in-service programs. All would benefit from programs that are coordinated in their state, distict, and school to provide coherent, strong programs that will help them to improve teaching and administrative practice. But perhaps more than any others, middle grades educators need immediately effective staff development programs to help them supplement their knowledge and skills with new theories, research, practice, and policies about the grades they teach -- information that was not provided and in many ways not available in their pre-service education. This is not a new message nor a new call, but it is a time of new opportunity.

References

American Association of School Administrators. (1986). *Profiling excellence in America's schools*. Arlington, VA: AASA.

Bacharach, S. B., Bauer, S. C., & Shedd, J. B. (1986). The learning workplace: The conditions and resources of teaching. (CART). *Ithaca, NY: Cornell University for the National Education* Association.

Becker, H. J. (1987). Addressing the needs of different groups of early adolescents: Effects of varying school and classroom organizational practices on students from different social backgrounds and abilities. (Report 16). Baltimore, MD: Center for Research on Elementary and Middle Schools, The Johns Hopkins University.

Becker, H. J. (1989). Education in the middle grades: Curriculum and classroom instructional practices. Paper presented at the annual meeting of the American Educational Research Association, San Francisco.

California State Department of Education. (1987). *Caught in the middle: Educational reform for young adolescents in California public schools*. Sacramento: California State Department of Education.

Carnegie Task Force. (1986). *A nation prepared: Teachers for the 21st century*. New York: Carnegie Foundation.

Center for Research on Elementary and Middle Schools. (1985). Overview: The effective middle schools program. Baltimore: The Johns Hopkins University -- CREMS.

Children's Defense Fund. (1988). *Making the middle grades work*. Washington, D. C.: CDF

Conley, M. M. W. (1983). Increasing students' reading achievement via teacher inservice education. *The Reading Teacher, 36*, 804-809.

Cruickshank, D. R., Larish, C., Thomps, L. (1979). What we think we know about inservice education. *Journal of Teacher Education, 30* (1), 27-31.

DuPuis, M. M., Askov, E. N., & Lee, J. W. (1979). *Journal of Educational Research, 73*, 66-74.

Education Commission of the States. (1983). *Action for excellence: A comprehensive plan to improve our nation's schools*. Denver: Education Commission of the States.

Epstein, J. L. (1988). Effective schools or effective students: Dealing with diversity. In R. Haskins and D. MacRae (eds.) *Policies for America's Public Schools*. Norwood, NJ: Ablex.

Epstein, J. L. (1986). Parents reactions to teacher practices of parent involvement. *The Elementary School Journal, 86*, 277-294.

Epstein, J. L. and Mac Iver, D. J. (1989). Education in the middle grades: Overview of a national survey of practices and trends. Paper presented at the annual meeting of the American Educational Research Association, San Francisco.

Fenstermacher, G. D. & Berliner, D. (1985). Determining the value of staff development. *The Elementary School Journal, 85* (3), 281-314.

George, P. S. and Oldaker, L. L. (Dec 1985/Jan 1986). A national survey of middle school effectiveness. *Educational Leadership*, 79-85.

Goodlad, J. I. (1984). *A place called school.* NY: McGraw-Hill Book Company.

Holmes Group Consortium. (1986). *Tomorrow's teachers.* East Lansing, MI: Michigan State University, Erickson Hall.

Griffin, G. (1983). Implications of research for staff development programs. *Elementary School Journal, 83*, 414-426.

Guskey, T. R. (1986). Staff development and the process of teacher change. *Educational Researcher, 15*, (5) 5-12.

Joyce, B. & Showers, B. (1980). Improving inservice training: The messages of research. *Educational Leadership, 37*, 379-385.

Joyce, B. & Showers, B. (1983). *Power in staff development through research on training.* Alexandria: ASCD.

Korinek, L., Schmid, R. & McAdams, M. (1985). Inservice types and best practices. *Journal of Research & Development in Education, 18* (2), 33-38.

Lipsitz, J. (1984). *Successful schools for young adolescents.* New Brunswick: Transaction Books.

Lipsitz, J. (1980). *Growing up forgotten.* New Brunswick: Transaction Books.

Maryland Commission on Secondary Education. (1985). Recommendations, school administration and climate: Volume V. Baltimore, MSDE.

Mac Iver, D. J. and Epstein, J. L. (1989). Education in the middle grades: Teacher teams advisory groups, guidance, and other components for responsive education. Paper presented at the annual meeting of the American Educational Research Association, San Francisco.

Maryland Task Force on the Middle Learning Years. (1989). *What matters in the middle grades*? Baltimore: Maryland State Department of Education.

McPartland, J. M., Coldiron, J. R. & Braddock, J. H. II (1987). A description of school structures and classroom practices in elementary, middle, and secondary schools. (Report 14). Baltimore, MD: Center for Research on Elementary and Middle Schools, The Johns Hopkins University.

McPartland, J. M. (1987). Balancing high-quality subject-matter instruction with positive teacher-student relations in the middle grades. (Report 15). Baltimore, MD: Center for Research on Elementary and Middle Schools, The Johns Hopkins University.

National Association of Secondary School Principals. (Undated). *An agenda for excellence at the middle level.* Reston, VA: NASSP.

National Governor's Association. (1986). *Time for results: The governor's 1991 report on education*. Washington DC: National Governor's Association.

Olson, L. A teaching hospital model. (1986). *Education Week*. November 19, 1986.

Pansegrau, M. (1984). Teachers' perspectives on inservice education. *The Alberta Journal of Educational Research, 30* (4), 239-258.

Pink, W. T. 1989. Effective staff development for urban school improvement. Paper presented at the annual meeting of the American Educational Research Association, San Francisco.

Pennsylvania Department of Education. (1984). *Educational Quality Assessment (EQA) manual for interpreting intermediate school reports*. Pennsylvania: Division of Educational Testing and Evaluation.

Pennsylvania Department of Education. (1986). *Educational Quality Assessment (EQA) Data*. Pennsylvania: Division of Educational Testing and Evaluation.

Simmons, R. G., Blyth, D. A., Van Cleave, E. G., and Bush, D. M.. (1979). Entry into early adolescence: The impact of school structure, puberty, and early dating on self-esteem, *American Sociological Review, 44*, 948-967.

Sparks, G. M. (1986). The effectiveness of alternative tracking activities in changing teaching practices. *American Education Research Journal, 23* (2), 217-225.

Toepfer, C. F., Jr. (1984). Staff development and in-service education. In J. H. Lounsbury (Ed.), *Perspective: Middle School Education, 1964-1984*. Columbus, OH: National Middle School Association.

Toepfer, C. F. Jr. (1987). Middle schools: Missing Links. *Education Week, 32*.

Wade, R. K. (Dec. 1984/Jan. 1985). What makes a difference in inservice teacher education? A meta-analysis of research. *Educational Leadership, 48-58*.